

RECEIVED
CENTRAL FAX CENTER

MAY 12 2008

IN THE CLAIMS

Please amend claims 22-24 and add claims 25-27 as follows:

1-7. (Canceled)

8. (Previously Presented) Equipment for the treatment of waste-water containing organic pollutants, comprising:

a main reactor;

an anterior reactor; and

means for feeding in untreated sewage, removing cleaned water and sludge, and aerating waste-water entered into the main reactor;

said anterior reactor including a mixer;

the main reactor and the anterior reactor being separated from each other by a partition wall;

said equipment further comprising at least one device between the main reactor and the anterior reactor for recirculation of waste-water;

said at least one device having a U-shaped pipe-piece providing arms for the recirculation, one arm of the U-shaped pipe-piece being situated in the anterior reactor, another arm of the U-shaped pipe-piece being situated in the main reactor;

said partition wall separating a lower end of said one arm and a lower end of said another arm, said lower end of said one arm and said lower end of said another arm being connected by a pipe passing through said partition wall;

an upper end of said one arm and an upper end of said another arm being situated at a height corresponding to a minimum water-level as determined in the main and aeration reactors;

wherein an air-pipe with an end-fitting ensuring airlift function is connected to said

another arm of the U-shaped pipe-piece situated in the main reactor; and

wherein there is a transfer opening, disposed in the partition wall a certain distance from the lower end of said one arm and the lower end of said another arm, for ensuring the recirculation.

9. (Previously Presented) The equipment of claim 8, wherein the air-pipe branches off an aerating system belonging to the main reactor.

10. (Previously Presented) The equipment of claim 9, wherein the main reactor has a blowing device and an air-pipe extending from it, air-distributor pipes connected to the air-pipe and located near the main reactor, and air-injector heads connected to the air-distributor pipes.

11. (Previously Presented) The equipment of claim 10, further comprising a cleaned-water draining device including a decanter situated on a floating body.

12. (Previously Presented) The equipment of claim 11, further comprising a pump located in a compensation basin for feeding in untreated sewage, the pump extending into the anterior reactor.

13. (Previously Presented) The equipment of claim 10, further comprising a pump located in a compensation basin for feeding in untreated sewage, the pump extending into the anterior reactor.

14. (Previously Presented) The equipment of claim 9, further comprising a cleaned-water draining device including a decanter situated on a floating body.

15. (Previously Presented) The equipment of claim 9, further comprising a pump located in a compensation basin for feeding in untreated sewage, the pump extending into the anterior reactor.

16. (Previously Presented) The equipment of claim 8, wherein the main reactor has a blowing device and an air-pipe extending from it, air-distributor pipes connected to the air-pipe and located near the main reactor, and air-injector heads connected to the air-distributor pipes.

17. (Previously Presented) The equipment of claim 8, further comprising a cleaned-water draining device including a decanter situated on a floating body.

18. (Previously Presented) The equipment of claim 8, further comprising a pump located in a compensation basin for feeding in untreated sewage, the pump extending into the anterior reactor.

19. (Previously Presented) The equipment of claim 8, wherein the main reactor has a blowing device and an air-pipe extending from it, air-distributor pipes connected to the air-pipe and located near the main reactor, and air-injector heads connected to the air-distributor pipes;

said equipment further comprising a cleaned-water draining device including a decanter situated on a floating body.

20. (Previously Presented) The equipment of claim 8, wherein the main reactor has a blowing device and an air-pipe extending from it, air-distributor pipes connected to the air-pipe and located near the main reactor, and air-injector heads connected to the air-distributor pipes;

said equipment further comprising a pump located in a compensation basin for feeding in untreated sewage, the pump extending into the anterior reactor.

21. (Previously Presented) The equipment of claim 8, further comprising a cleaned-water draining device including a decanter situated on a floating body, and a pump located in a compensation basin for feeding in untreated sewage, the pump extending into the anterior reactor.

22. (Currently Amended) A method for biological activated sludge treatment of waste-water containing organic pollutants, comprising:

a filling phase in which a main reactor and an anterior reactor are filled from a minimum level to a maximum level with untreated sewage first taken into a lower range of a sludge mass situated in the anterior reactor, and then taken from the anterior reactor to the main reactor, water situated in the main reactor being aerated;

a reaction phase in which nitrification-denitrification reaction takes place, the water situated in the main reactor being aerated, and water situated in the anterior reactor being stirred, practically mechanically, while the waste-water is recirculated between the main and anterior reactors;

a settling phase in which sludge is settled from the waste-water treated as above; and

a draining phase in which treated sewage is drained by decanting in such a way that water levels in the main and anterior reactors are reduced to a minimum level and excess sludge is removed from the main and anterior reactors;

wherein the filling phase comprises using a U-shaped pipe-piece to transfer untreated waste-water from the anterior reactor to the main reactor.

23. (Currently Amended) The method of claim 22, wherein the filling phase comprises using a U-shaped pipe-piece to transfer untreated waste-water from the anterior reactor to

~~the main reactor,~~ the untreated waste-water being is transferred to the main reactor using a siphon principle of the U-shaped pipe-piece, whereby the water levels in the anterior reactor and the main reactor are raised to a common maximum level.

24. (Currently Amended) The method of claim 22, wherein the reaction phase comprises blowing air through an air-pipe in an arm of ~~[[a]]~~ the U-shaped pipe-piece in the main reactor, thereby using the U-shaped pipe-piece as an airlift, a part of liquid in the anterior reactor being sucked through the U-shaped pipe-piece into the main reactor, a level of liquid in the main reactor being forced above a level of a transfer opening, an amount of the liquid in the main reactor exceeding the level of the transfer opening passing through the transfer opening back to the anterior reactor, whereby recirculation takes place.

25. (New) The method of claim 22, wherein the U-shaped pipe-piece is used so that an upper part of the treated water is moved from the anterior reactor to the main reactor and the excess sludge is removed from the main and anterior reactors.

26. (New) A method for biological activated sludge treatment of waste-water containing organic pollutants, comprising:

a filling phase in which a main reactor and an anterior reactor are filled from a minimum level to a maximum level with untreated sewage first taken into a lower range of a sludge mass situated in the anterior reactor, and then taken from the anterior reactor to the main reactor, water situated in the main reactor being aerated;

a reaction phase in which nitrification-denitrification reaction takes place, the water situated in the main reactor being aerated, and water situated in the anterior reactor being stirred, practically mechanically, while the waste-water is recirculated between the main and anterior reactors;

a settling phase in which sludge is settled from the waste-water treated as above; and

a draining phase in which treated sewage is drained by decanting in such a way that

water levels in the main and anterior reactors are reduced to a minimum level and excess sludge is removed from the main and anterior reactors;

wherein the reaction phase comprises blowing air through an air-pipe in an arm of a U-shaped pipe-piece in the main reactor, thereby using the U-shaped pipe-piece as an airlift, a part of liquid in the anterior reactor being sucked through the U-shaped pipe-piece into the main reactor, a level of liquid in the main reactor being forced above a level of a transfer opening, an amount of the liquid in the main reactor exceeding the level of the transfer opening passing through the transfer opening back to the anterior reactor, whereby recirculation takes place.

27. (New) The method of claim 26, wherein a part of liquid in the anterior reactor is sucked through the U-shaped pipe-piece into the main reactor, a level of liquid in the main reactor being forced above a level of a transfer opening, an amount of the liquid in the main reactor exceeding the level of the transfer opening passing through the transfer opening back to the anterior reactor, whereby recirculation takes place.